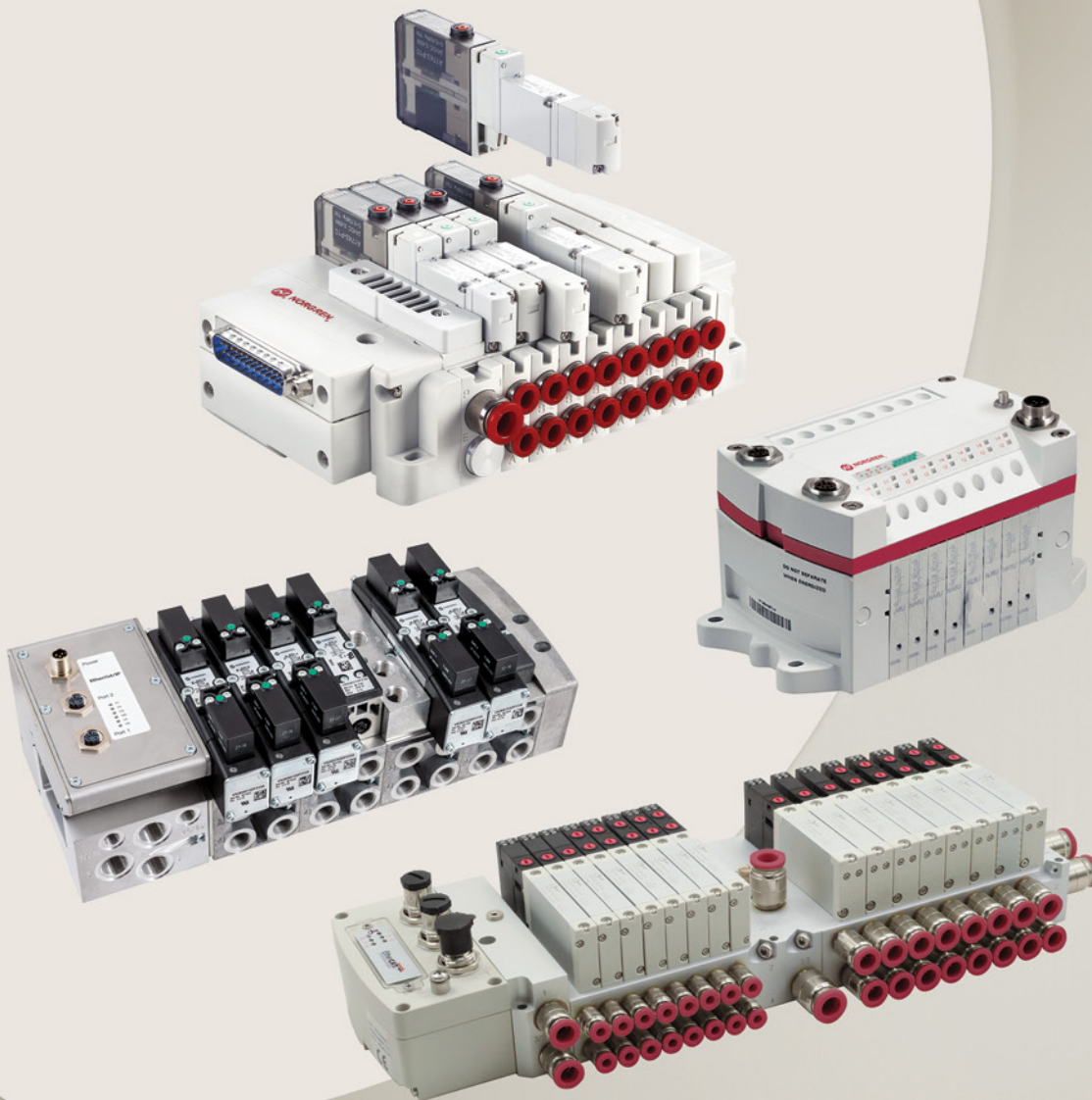


Industrial Automation

IMI Norgren

Valve Islands

Flexible and Modular for all
Industrial Automation Applications



Breakthrough
engineering for
a better world

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Breakthrough engineering for a better world

We create solutions for our customers which enable smarter, safer, more productive and sustainable factories, production lines and warehouse operations. Our pneumatic and electric motion systems help machine builders and end users around the world automate and optimise manufacturing and warehousing processes.

We have partnered with customers in industrial automation for over a century, applying our experience and innovation to create lasting value for their businesses. Our solutions support critical industries such as automotive, food and beverage, pharmaceuticals and even the space industry. We support the automation of precision manufacturing, product assembly, testing and packaging.

We use the latest digital technologies in our automation products and constantly innovate in close partnership with our customers. By applying our deep expertise, we can solve their toughest automation challenges, today and tomorrow. Through increased productivity, efficiency and safety, our customers can serve their own customers better, creating sustainable competitive advantage and delivering growth.

Our world-class product portfolio includes IMI Norgren, IMI Bimba, IMI Bahr and IMI Buschjost.

Breakthrough engineering you can count on.



IMI Norgren Valve Island Portfolio

Valve Islands, also known as valve manifolds, system valves or plug in type manifolds, are commonly used on machine installations to reduce assembly and downtime and provide easier fault diagnosis.

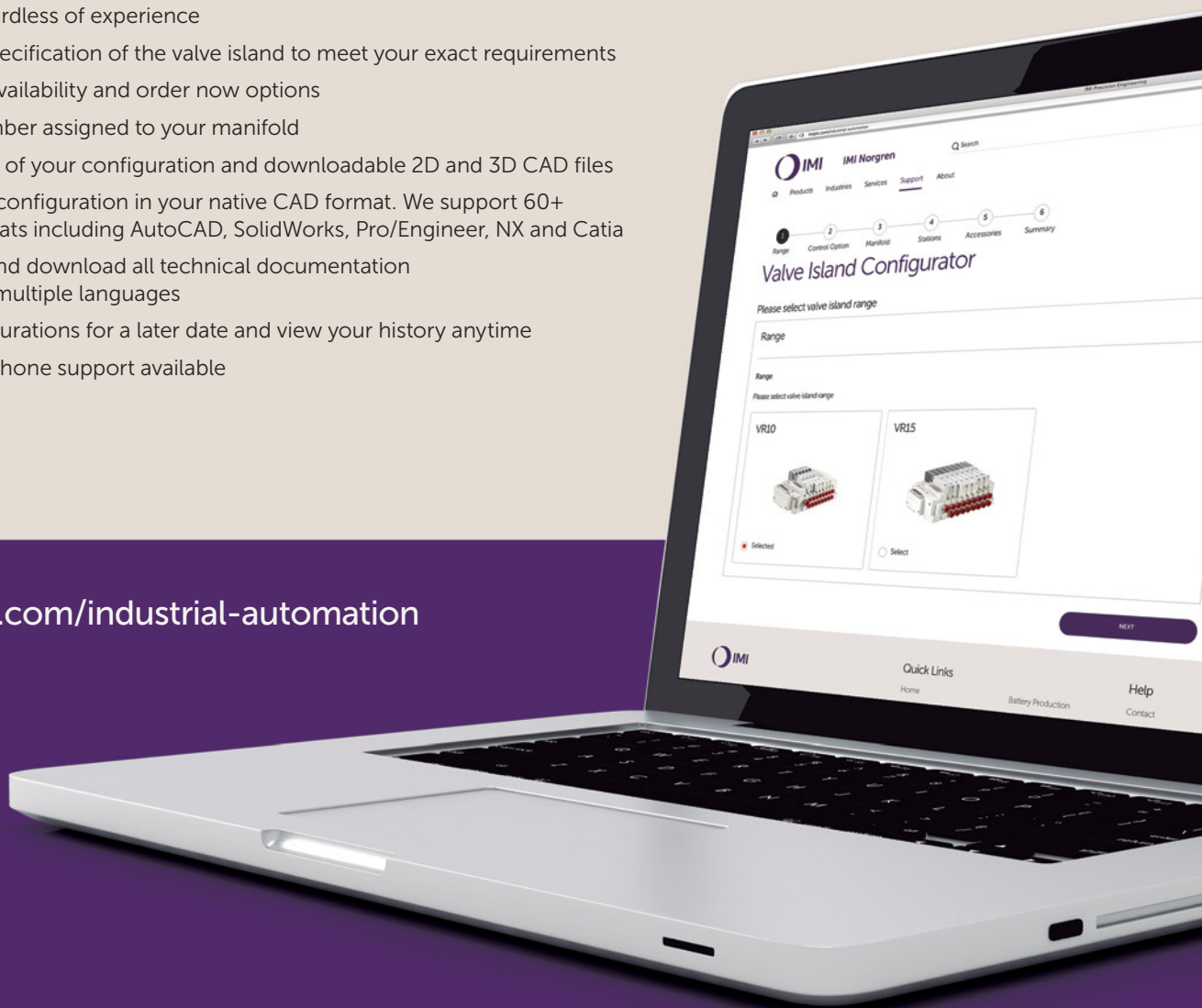
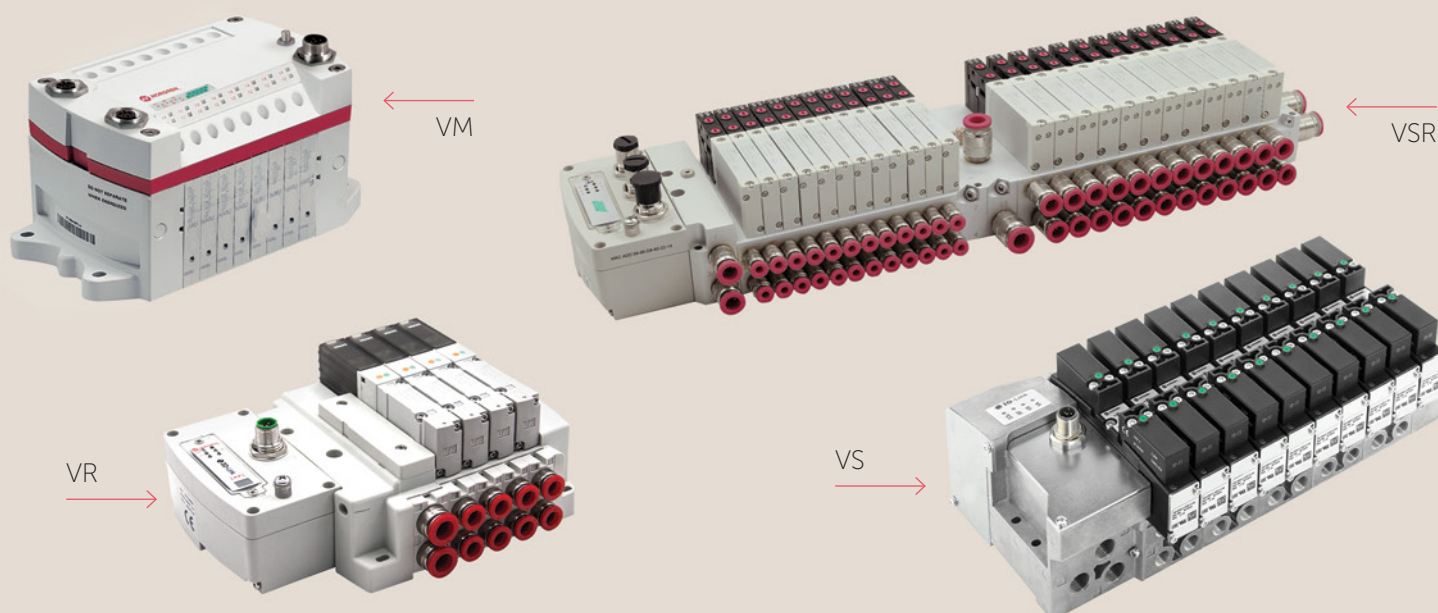
Valve islands are a collection of valves mounted into one unit, reducing pipework, electrical connections and complexity. We have been offering valve islands for over twenty years, and all our valve island ranges are configured individually to suit your needs and application.

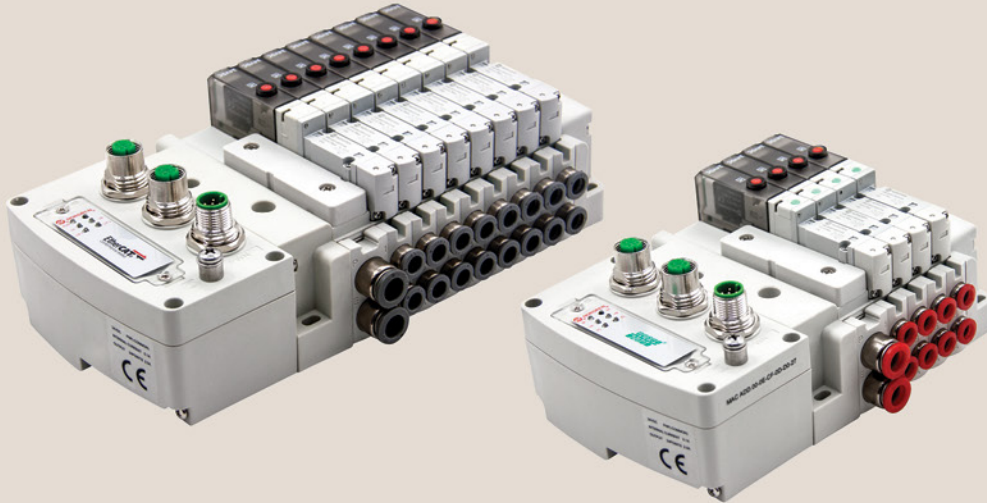
EtherCAT	VR10 270 l/min 2 - 24 Valves		VR15 590 l/min 2 - 24 Valves		VSR1 335 l/min 4 - 24 Valves		VSR2 530 l/min 4 - 24 Valves	
	VM10 430 l/min 8 - 16 Valves		VS18 650 l/min 4 - 20 Valves		VS26 1350 l/min 4 - 20 Valves			
PROFINET								
EtherNet/IP								
DeviceNet								
PROFIBUS	VM10 430 l/min 8 - 16 Valves				VS18 650 l/min 4 - 16 Valves		VS26 1350 l/min 4 - 16 Valves	
CANopen								
IO-Link								
Multipole	VM10 430 l/min 4 - 16 Valves		VM15 1000 l/min 4 - 16 Valves		VR10 270 l/min 2 - 24 Valves		VR15 590 l/min 2 - 24 Valves	
Single Wiring					VS18 650 l/min 2 - 20 Valves		VS26 1350 l/min 2 - 20 Valves	
Single Wiring	VM10 430 l/min 4 - 20 Valves		VM15 1000 l/min 4 - 20 Valves		VS18 650 l/min Mini ISO V40/41		VS26 1350 l/min Mini ISO V44/45	

Valve Island Configurator

- Intuitive, flexible and easy to use
- Flexible Step by step process that is easy navigate for any user regardless of experience
- Enables quick specification of the valve island to meet your exact requirements
- Provides price, availability and order now options
- Unique part number assigned to your manifold
- Live visualisation of your configuration and downloadable 2D and 3D CAD files
- Download your configuration in your native CAD format. We support 60+ native CAD formats including AutoCAD, SolidWorks, Pro/Engineer, NX and Catia
- Easy to access and download all technical documentation and available in multiple languages
- Save your configurations for a later date and view your history anytime
- Online and telephone support available

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VR Series Valve Islands

Flexibility and modularity have reached new levels with the **IMI Norgren VR Valve Island** range. A simple plug-in, sub-base style design allows for valves to be easily exchanged for easy installation and maintenance. Expanding the size and functionality of your Valve Island to match the changing demands of your application is a simple “plug-and-play” experience.

Available in two body sizes – 10mm and 15mm, the VR10/15 series can be used across a broad range of Industrial Automation markets, from food & beverage, packaging, labelling, textiles, glass production, metal production and paper and print.

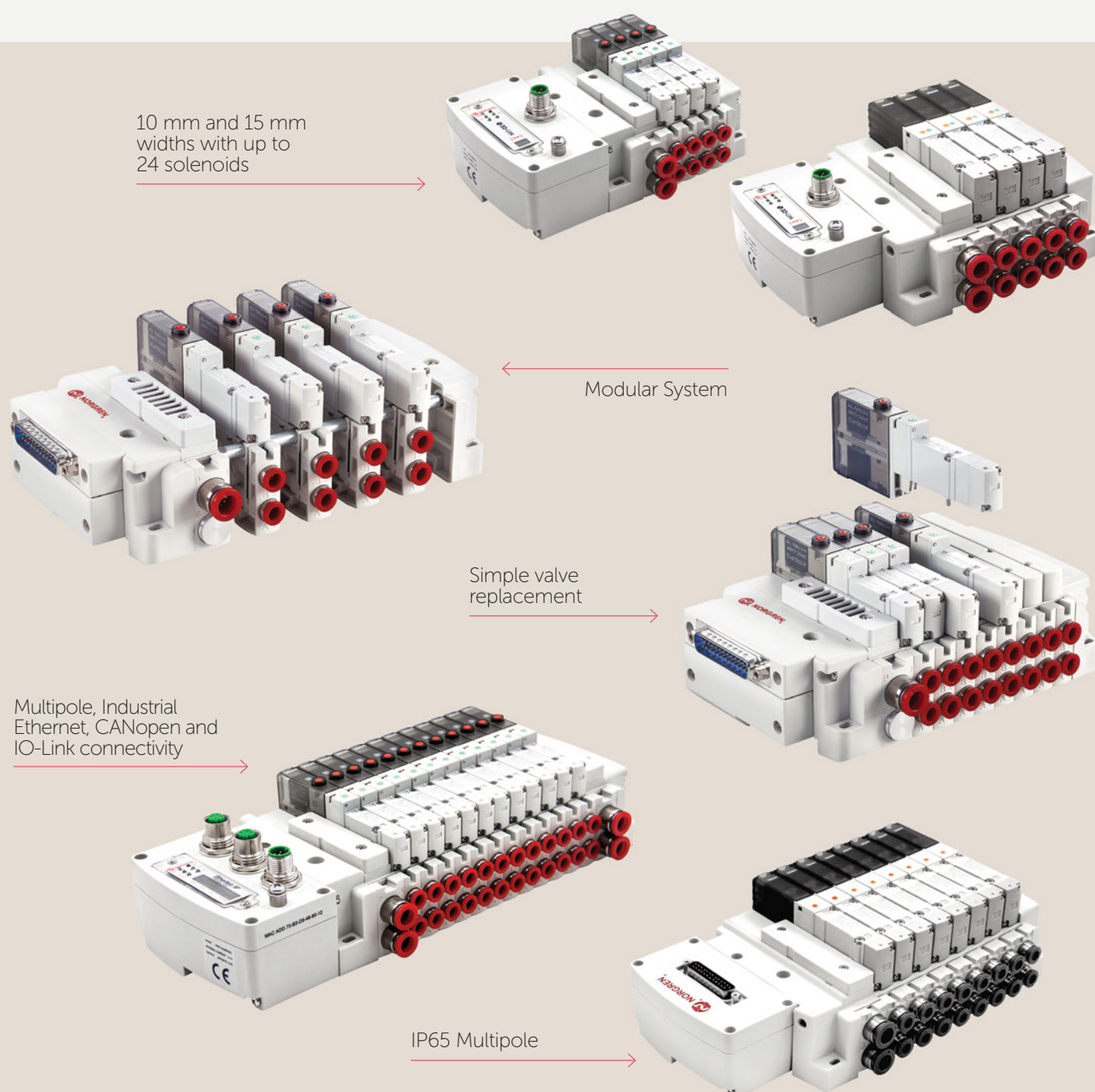
Product Highlights:

- **Modular** – A modular system offering a wide range of configuration options
- **Flexible** – Available in 10mm and 15mm with up to 24 solenoids with a wide range of valve functions
- **Reliable** – Using proven technology for long life over 30 million cycles
- **Connected** – Fast and easy connectivity via Multipole, EtherNet/IP, PROFINET, EtherCAT, CANopen and IO-Link
- **Easy Installation** – No restrictions in installation as connectors can be horizontal or vertical. Valve island can be direct mounted or mounted on a DIN rail.
- **Maintenance Friendly** – Simple plug-in sub base valve exchange allows easy exchange of system components and simple valve replacement option; and integrated silencers offer simple replacement
- **Energy Saving** – Low power solenoids (0.4w power consumption) with LED indicators
- **Space Saving** – If space is an issue, the IP40 base is available with valve slices
- **Easy to Configure** – BEST IN CLASS online configurator

●● Technical Specifications ●●

VR Series, 2 x 3/2, 5/2 or 5/3 Valve Island

- Two sizes, 10 mm and 15 mm widths with up to 24 solenoids
- Flow: 220 to 270 l/min (VR10), 460 to 590 l/min (VR15)
- Operating pressure: Maximum pressure 7 bar (101 psi)
- Operating temperature: -5°C to +50°C (+23°F to 122°F)
- Up to 24 solenoids
- 24V DC & 12V DC Multipole, EtherNet/IP, PROFINET, EtherCAT, CANopen and IO-Link
- Dynamic Softseal spool valve, solenoid pilot operated
- LED indicator of solenoid function
- No restriction in installation orientation
- Easy to replace valves, fittings and silencers
- Robust yet lightweight construction
- IP40 and IP65 versions available



VSR Series Valve Islands

The VSR Series is engineered to deliver versatility, simplicity and reliability for modern automation systems. Its expandable sub-base design allows flexible configurations and easy scalability, including the ability to mix 10 mm and 15 mm valve sizes on a single valve island.

Designed for straightforward installation and maintenance, VSR enables fast valve replacement and simple expansion to match changing machine requirements. With robust IP65 protection and support for Industrial Ethernet communication and Multipole, the VSR Series provides a reliable, modular valve island solution for a wide range of industrial applications.

Designed for modularity and protection – engineered from the inside out

A robust IP65 construction showcasing the modular architecture of the VSR Series, with clearly defined components designed for efficient assembly, servicing and long-term reliability.

1 Control module

2 Interface plates

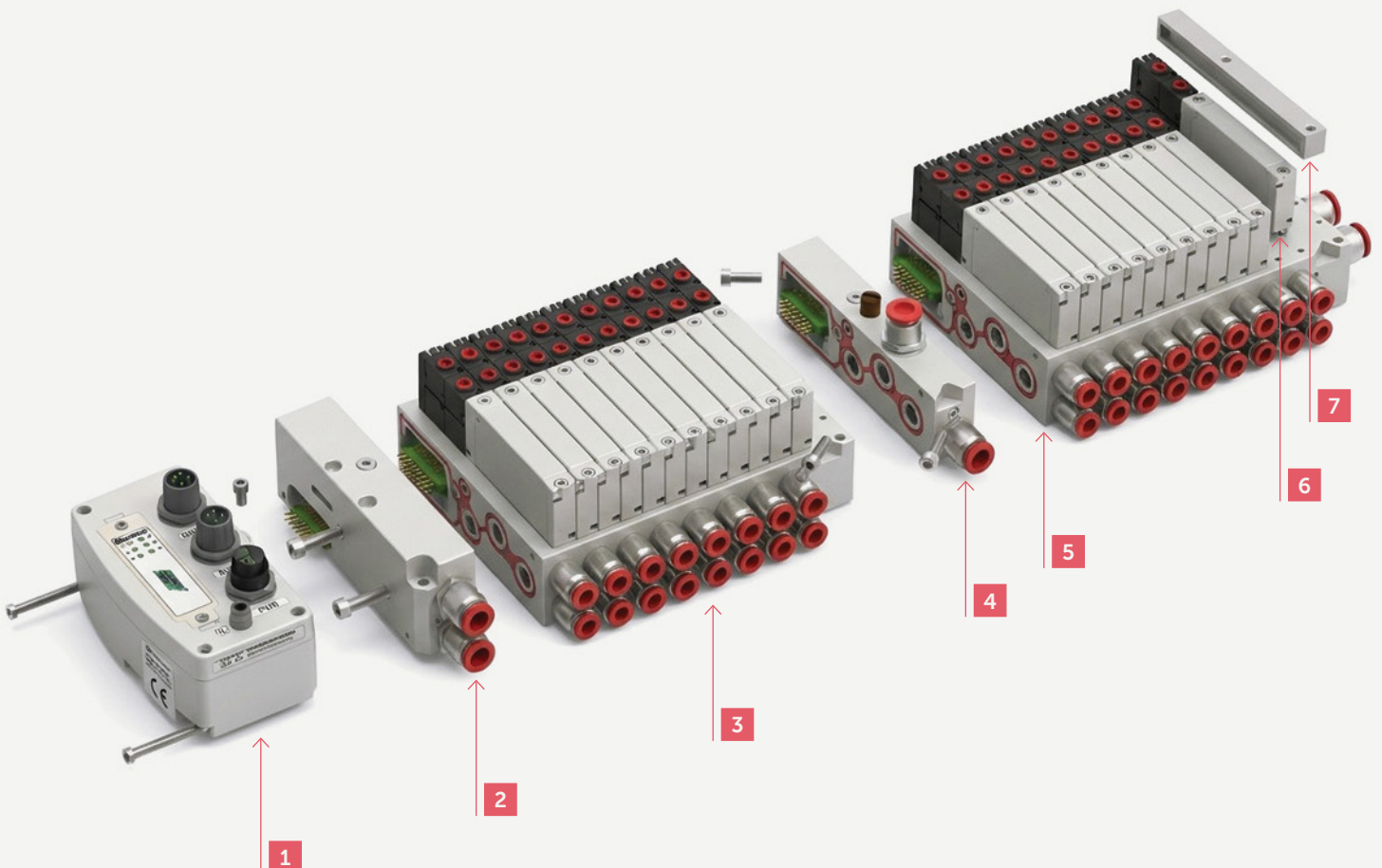
3 Extension Sub-Base

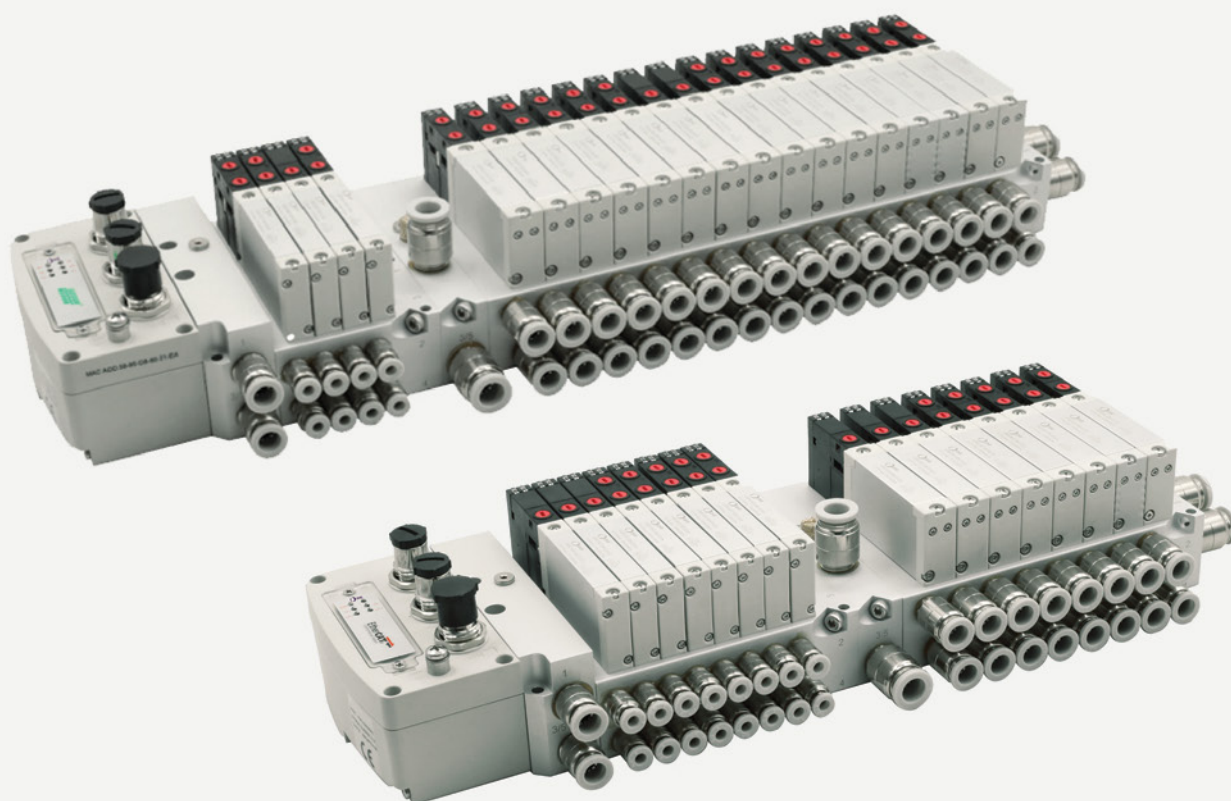
4 ISEM plate

5 Fixed length Sub-Base

6 Valve slice

7 Blanking plate





Versatility

- Expandable sub-base design supporting a wide range of configurations
- Mix 10 mm and 15 mm valve sizes on a single valve island
- Scalable from 4 to 24 stations, up to 48 solenoids
- Suitable for a broad range of applications, from factory automation to packaging and food processing

Simplicity

- Modular “plug-and-expand” architecture for straightforward system growth
- Fast and easy valve replacement to minimise downtime
- Clear, structured layout with easily identifiable components
- Simple expansion to match changing machine requirements

Reliability

- Robust IP65-rated construction for demanding industrial environments
- Reliable performance in any installation orientation
- Designed for long-term operation with consistent, repeatable performance
- Industrial Ethernet communication and Multipole ensuring stable and dependable connectivity



Factory Automation



Material Handling



Food Processing



Packaging

●● Technical Specifications ●●

VSR Series Valve Island

- 2x3/2, 5/2 or 5/3 valve slices
- Two valve sizes, 10mm and 15mm widths
- Both valve sizes can be mixed on a single valve island
- Operating pressure: Maximum pressure 8 bar (116 psi)
- Operating temperature: -5 to +50C (+23 to 122F)
- Up to 24 valves, 48 solenoids
- Dynamic softseal spool valve, solenoid pilot operated
- PROFINET & EtherCAT
- Maintenance and upgrade made simple with easy-to-replace valve
- IP65 protection



VSR1

For compact machines requiring flexible configuration and space-efficient design

Valve size	10 mm
Functions	2 × 3/2, 5/2 and 5/3 valves
Flow rate	Up to 335 l/min
Stations	From 4 up to 24 stations
Solenoids	Up to 48 solenoids
Ports	Outlet ports: Ø4, Ø6, Ø5/32", Ø1/4" Supply & exhaust ports: Ø8, Ø5/16"
Voltage	24 V DC

VSR2

For higher-flow automation systems requiring robust, scalable valve islands

Valve size	15 mm
Functions	2 × 3/2, 5/2 and 5/3 valves
Flow rate	Up to 530 l/min
Stations	From 4 up to 24 stations
Solenoids	Up to 48 solenoids
Ports	Outlet ports: Ø6, Ø8, Ø1/4", Ø5/16" Supply & exhaust ports: Ø10, Ø3/8"
Voltage	24 V DC

VSR – The Right Valve Size for Every Application

By combining different valve sizes on one valve island, each application gets exactly the flow it needs.

The result: optimized air usage, improved efficiency, and reduced energy costs.

●● Smarter Valve Sizing.
Lower Energy Consumption. ●●

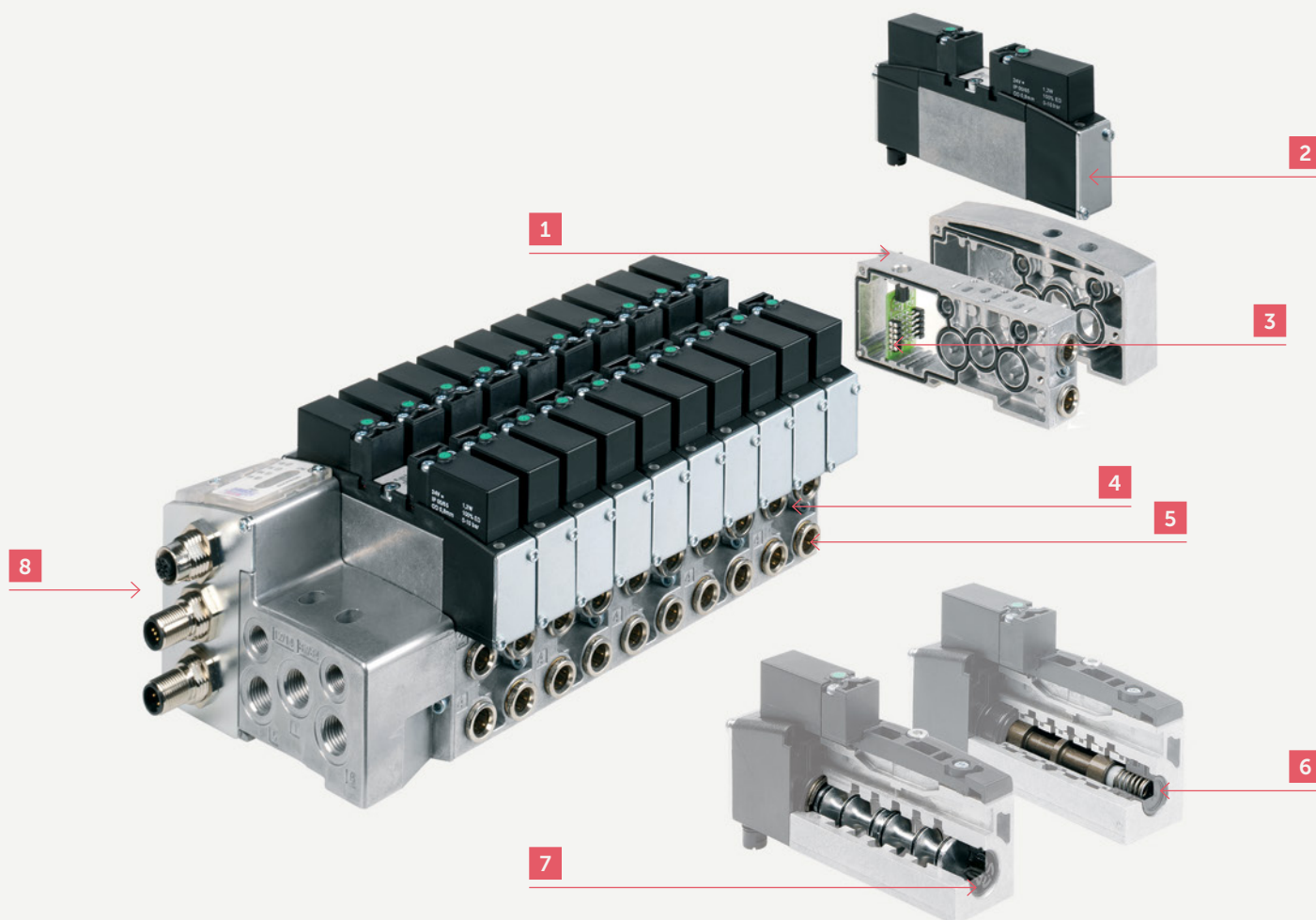


VS Series Valve Islands

The VS Series gives you the versatility to choose the features you need with the modularity to easily expand and add accessories. By combining flexibility and Swiss-engineered quality, we have created a no-compromise valve range with unlimited ability. Whether using a simple Multipole, complex Fieldbus, PROFINET, EtherNet/IP, or IO-Link system expanding the size of your valve island to match the changing demands of your equipment is a simple “plug-and-play” experience. Our plug-in Printed Circuit Board (PCB) technology takes only seconds to install and additional sub-bases can be attached with only two screws.

The VS18 and VS26 valve islands are unique in offering two spool technologies. To maximise the speed of your pneumatic system, use our softseal spool to achieve enhanced flow rates. For extended life, our glandless spool and sleeve delivers hundreds of millions of troublefree cycles. Or incorporate both spool technologies within the same valve island to optimise your machine’s performance.

- 1 Add up to 4 stations easily**
No need to disassemble the valve island (no tie rods)
- 2 Simple installation**
Plug-in sub-base valve
- 3 Correct connection guaranteed**
Simple plug-in electronics
- 4 Only seconds to install**
Only 2 screws for additional sub-base attachment
- 5 Integrated fittings (VS18/VS26)**
Reduce installation time, minimise leak paths
- 6 Total reliability**
Glandless spool and sleeve deliver millions of trouble-free cycles
- 7 Maximum speed**
Soft seal spool for enhanced flow rates
- 8 Connected**
Fast and easy connectivity via Multipole, Fieldbus, EtherNet/IP, PROFINET and IO-Link



Innovation

- 2 patents
- Universal PNP/NPN 24V DC Multipole connection
- One Piece Solid PCB valve connection system, eliminating potential bad connections
- Extensive multi-pressure options, allows pressure/ vacuum zoning within the same valve island

Modular

- Fieldbus and Multipole extendable in single stations
- Industrial Ethernet and IO-Link extendable in double stations
- Up to 40 solenoid valves depending on Fieldbus, Industrial Ethernet, IO-Link or Multipole
- Extensive sandwich accessory options
- Two sizes of plug-in sub-base valves
- Flow from 550 to 1350 l/min.

Versatile

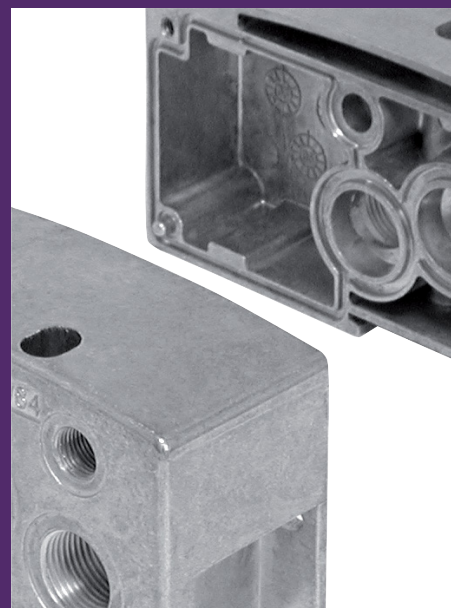
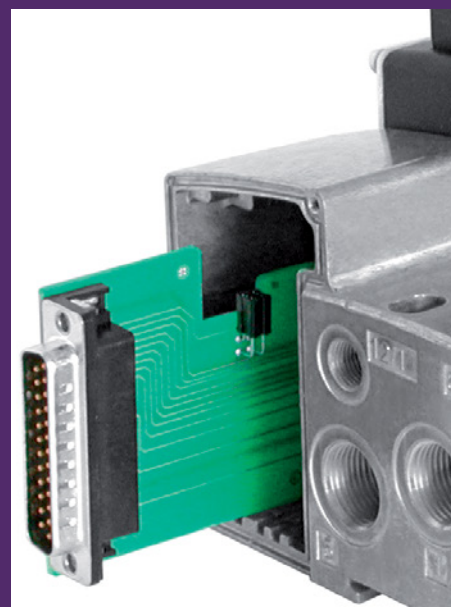
- Two spool technologies with unique advantages
- Universal PNP/NPN 24V DC Multipole
- Eleven valve configurations
- Two Multipole voltages
- Three integrated Fieldbus protocols
- Two Industrial Ethernet protocols and IO-Link available
- Numerous porting and manual override options
- Millions of possibilities

Reliable

- 200 million cycles valve life (glandless spool and sleeve)
- Robust construction
- IP 65 and NEMA 4
- Durable electrical technology
- ATEX approved

Maintenance friendly

- Simple plug-in sub-base valve exchange
- Interruption-free valve replacement option
- Easy exchange of system components





●● Plug-in technology ●●

Pneumatics

- Two sizes, 18 mm and 26 mm width
- Up to 20 stations (40 solenoids) depending on protocol
- VS18 and VS26 comply with ISO 15407-2 standard
- Simple multi-pressure functionality
- 2 x 3/2 valves in one body
- 2 x 2/2 valves in one body (VS18/VS26)

Multipole

- 24V DC and 115V AC voltage options
- Wide range of electrical connections
- Field expandable up to four additional stations
- One universal 24V DC PCB for both PNP/NPN

Fieldbus

- Compact size through integrated electronics
- Field expandable up to four additional stations
- Wide range of protocols offered

Industrial Ethernet

- Ultimate flexibility in machine design
- Standardised platform for networking of devices
- Real-time data transmitted simultaneously over a common medium
- Large network coverage and almost unlimited number of users
- Large amounts of data transferable
- Equal bus access authorisation
- Quick and easy commissioning

VS Series gives you options

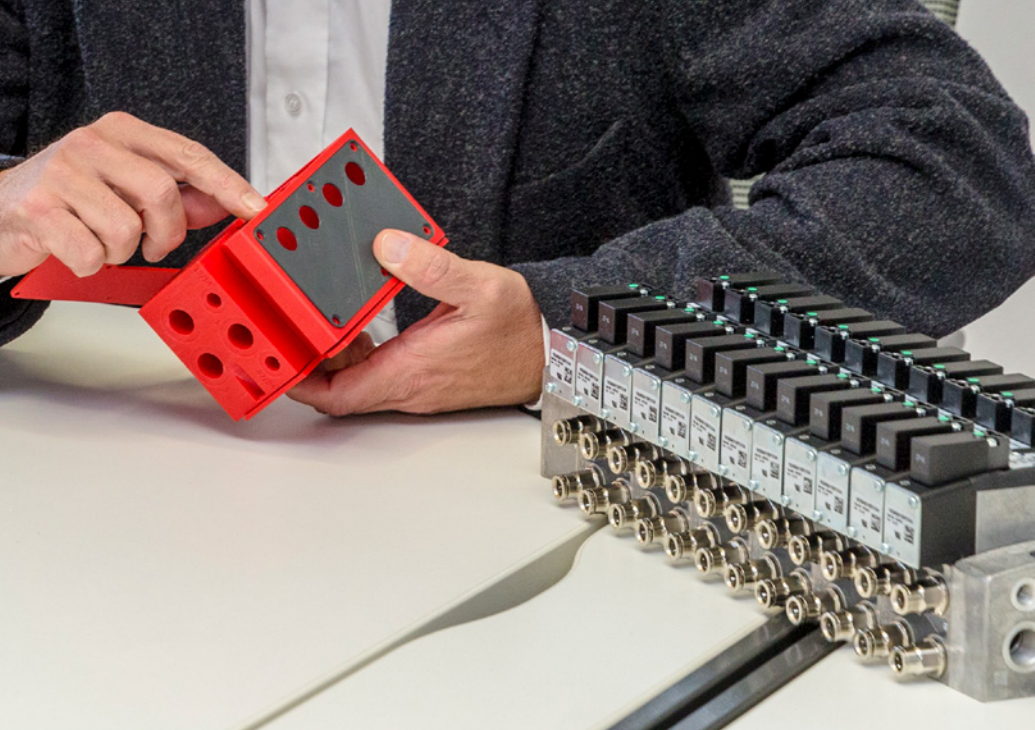
Glandless or softseal spool valves – the right technology, for every application

For a higher flow rate use our softseal spool.

For maximum reliability choose our glandless spool technology.

Or simply use both to optimise your machine performance.

Size	Spool type	Flow l/min	Max. op. Pressure	Spool technology rating
VS18	Glandless	550 l/min	16 bar	200 million cycles
VS18	Softseal	650 l/min	10 bar	50 million cycles
VS26	Glandless	1000 l/min	16 bar	200 million cycles
VS26	Softseal	1350 l/min	10 bar	50 million cycles



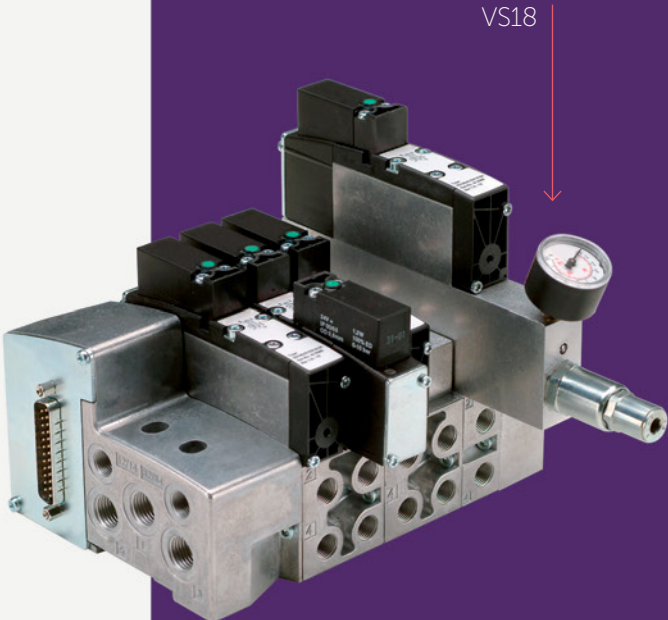
●● VS Series Quick Guide ●●

VS18

Product specification	Flow	550 to 650 l/min
	Ports 2&4	G1/8, 6 mm or 8 mm PIF NPTF 1/8 Plug-in 1/4, 6 mm and 8 mm
	Fieldbus	4 to 16 stations
	Industrial Ethernet	4 to 20 stations
	Multipole	2 to 20 stations
	IO-Link	2 to 20 stations
	Voltage	24V DC or 115V AC* (*Multipole only)

VS26

Product specification	Flow	1000 to 1350 l/min
	Ports 2&4	G1/4, 8 mm or 10 mm PIF 3/8 PIF, NPTF 1/8
	Fieldbus	4 to 16 stations
	Industrial Ethernet	4 to 20 stations
	Multipole	2 to 20 stations
	IO-Link	2 to 20 stations
	Voltage	24V DC or 115V AC* (*Multipole only)



VM Series Valve Islands

The VM Series Valve islands are available in both 10 mm and 15 mm valve body widths and provide unsurpassed flow rates of 430 l/min and 1,000 l/min respectively. VM10/15 offer one of the best footprint to flow ratios in the market.

Offering fast and easy connectivity via Individually wired, Multipole, Fieldbus*, PROFINET* or EtherNet/IP*.

You can also choose from DIN rail, through hole, panel and sub base mounting options. Valve islands can be configured from 2 to 20 stations (Individually Wired option above 16 stations only) with single or double solenoids and with a high number of possibilities for manual overrides and tube fitting sizes. This results in over 15 million possible configurations. Selection, however, is simple. We provide an online configuration tool which provides you with a part number and price, and you can download your configuration in your native CAD format.

VM10

A 10 mm valve body width system valve with an unsurpassed flow rate of 430 l/min. Its design ensures it is highly suitable for many applications across a wide range of industry sectors. The high number of options available enables configuration of the valve islands to meet your exact requirements.

- Ultimate flexibility in machine design
- Standardised platform for networking of devices
- Real-time data transmitted simultaneously over a common medium
- Large network coverage and almost unlimited number of users
- Large amounts of data transferable
- Equal bus access authorisation
- Fast and easy connectivity via Individually wired, Multipole, Fieldbus, PROFINET or EtherNet/IP
- Available in 8, 10, 12 and 16 stations having up to 32 solenoids

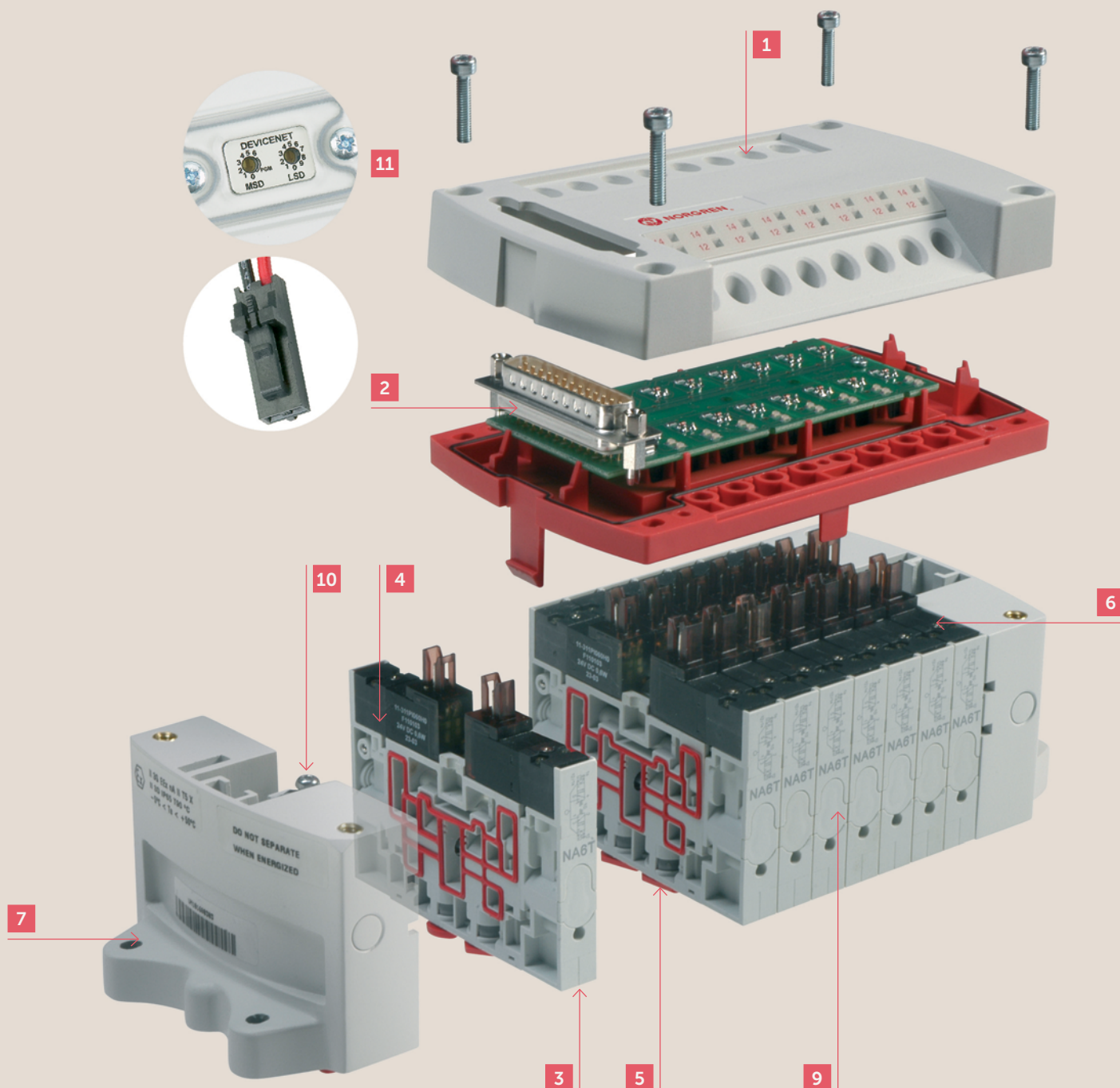
VM15

A 15 mm valve body width system valve, again providing unsurpassed flow for size, this time 1,000 l/min. It has some of the options offered with the VM10 plus some additional multipressure options often required with higher flow applications.

Configuring valve islands to exactly match requirements is easy using our simple software configuration tool available on-line.

* Fieldbus and Industrial Ethernet options only available on VM10.

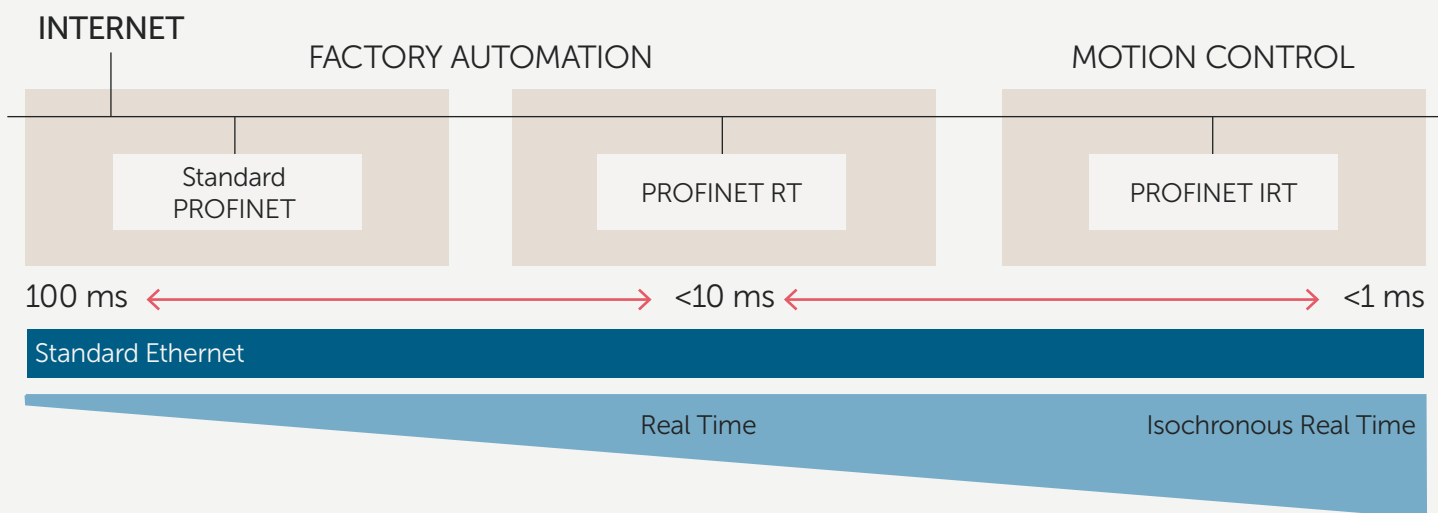




- 1** Engineered polymer provides increased strength and weight reduction
 - 2** Individually wired and Multipole options provide connection flexibility
 - 3** 430 l/min from a 10 mm valve body width 1,000 l/min from a 15 mm valve body width provides maximum flow to size ratio
 - 4** 32 solenoids possible with Multipole, Fieldbus*, PROFINET* or EtherNet/IP* enabling a reduction in the number of valve islands required
 - 5** Integral push in fittings reduce component count, reduce valve island size and eliminate potential leak paths
 - 6** Manual override options provide the ability to choose the variant best suited to the application
 - 7** Through hole mounting enables valve islands to be directly mounted without the need for additional brackets
 - 8** The VM range has CE and UL approvals (excluding Industrial Ethernet) and is LABS free, ensuring the product complies with the required international standards.
 - 9** Laser etched part numbers ensure easy identification of components
 - 10** Single screw and hinge locking mechanism for securing each valve to the next facilitates simple valve addition and exchange (no tie rods)
 - 11** Rotary switches for simple setting and identification of Fieldbus node addresses
- Balanced spool design enables the valves to be used with both pressure and vacuum
 - Proven spool and seal pack design ensures a high life of 100,000,000 cycles

Valve Islands with Industrial Ethernet

- Ultimate flexibility in machine design
- Standardised platform for networking of devices
- Real-time data transmitted simultaneously over a common medium
- Large network coverage and unlimited number of users
- Large amounts of data transferable
- Equal bus access authorisation

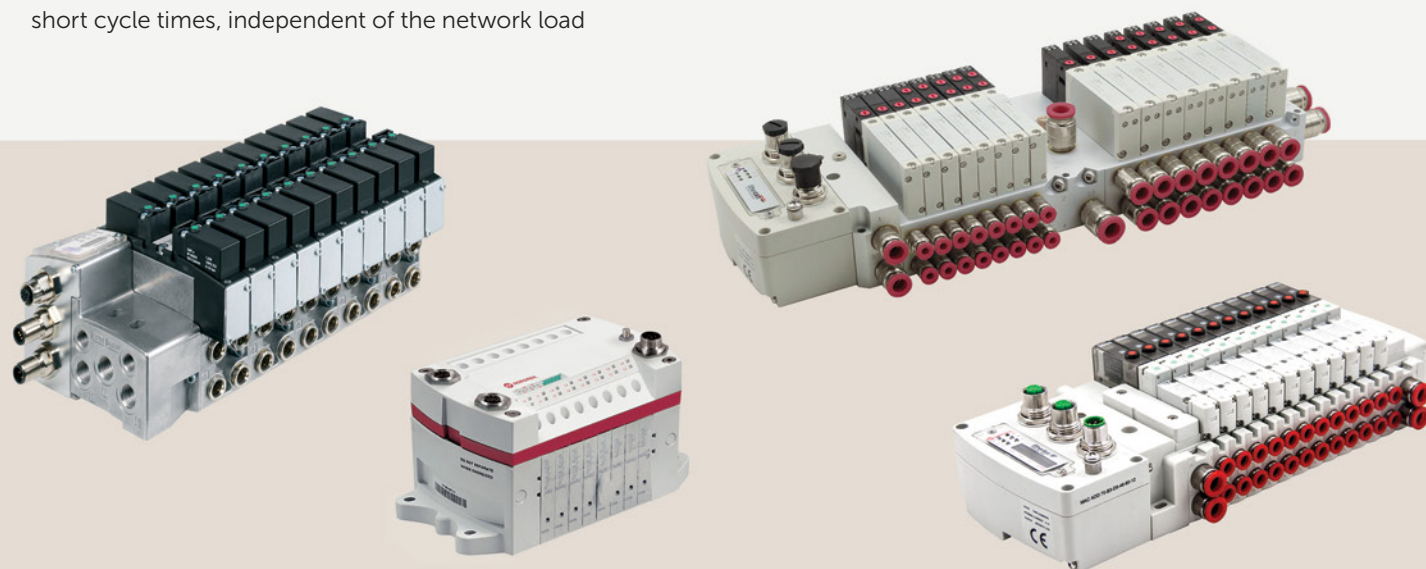


Benefits of PROFINET IRT

- PROFINET IRT offered as standard
- Isochronous Real Time - The highest level of PROFINET available
- The latest and most advanced Industrial Ethernet Protocol
- For use in fast motion control applications that need precise and deterministic data exchange
- Ideal for applications where motion control is critical to production cycles in the most demanding control environments
- Over 100 times faster than standard Ethernet - Ultra short cycle times, independent of the network load

Benefits of EtherNet/IP

- More flexible network connectivity with a robust industrial standard
- Various topology options available
- Users are provided with standard Ethernet topology for industrial automation applications
- Based on standard Internet and Ethernet

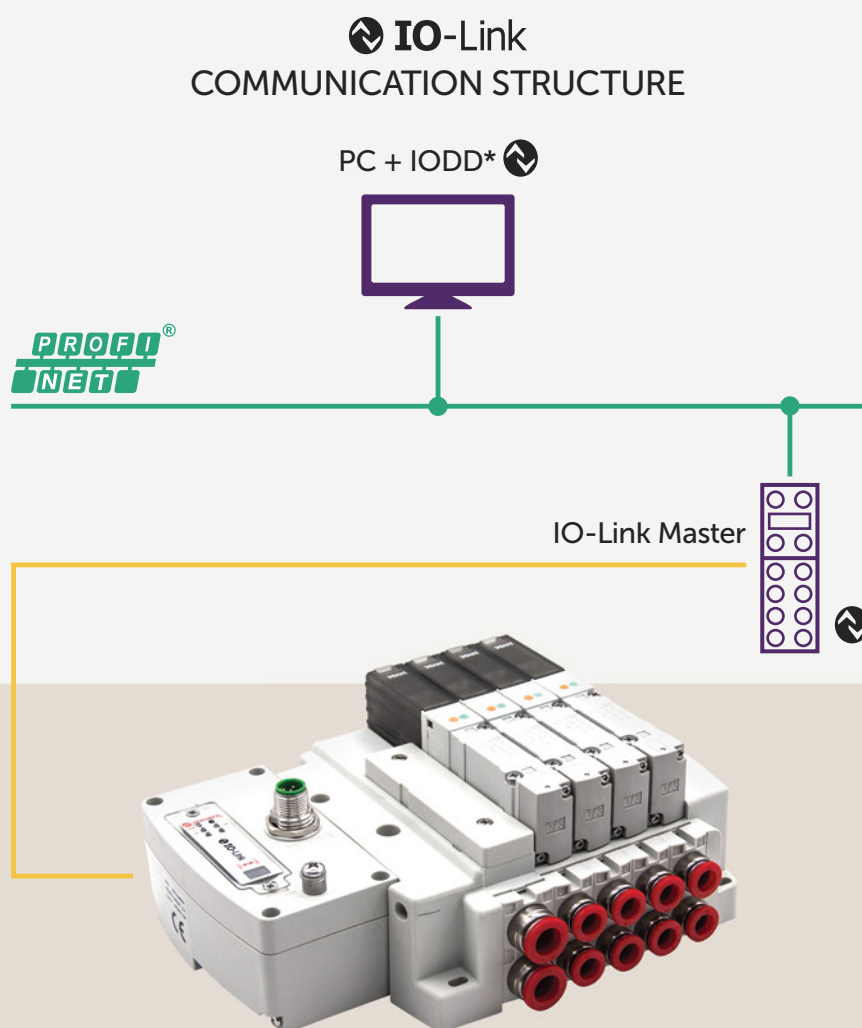


Valve Islands with IO-Link

- Open standard serial communication protocol
- Standardised worldwide IO technology
- Communication specification IEC61131-9
- Connects intelligent sensors, field-devices and actuators
- Manufacturer independent "point-to-point" connection
- Uses advantages of available IO interfaces

Benefits of IO-Link

- **Standardised and Reduced Wiring** – IO-Link does not require any special or complicated wiring
- **Increased Data Availability** – Access to sensor-level data helps ensure the smooth operation of system components
- **Remote Configuration and Monitoring** – Users can read and change device parameters through the control system software, enabling fast configuration and commissioning
- **Simple Device Replacement** – IO-Link's data storage capability allows for automated parameter reassignment in case of device replacement
- **Extended Diagnostics** – IO-Link provides users with visibility into errors and health status from each device



* IODD = IO Device Description

Accessories

We offer a number of accessories and spare elements for our valve island ranges.

VS Series

Versatile platform with an extensive accessory system

Pressure control

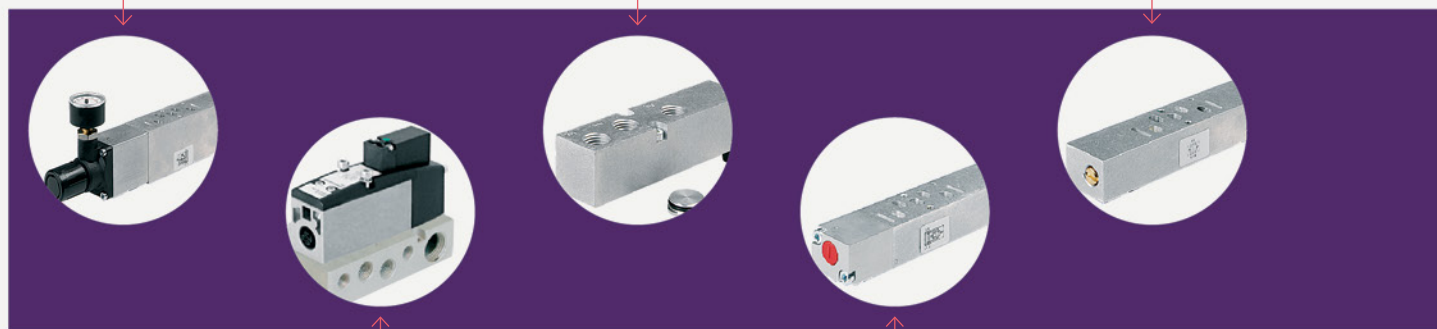
Four choices of pressure regulator sandwich plates provide individual pressure and force control as well as optimised air consumption.

Multi-pressure control

Intermediate supply & exhaust manifold and blanking discs enable simple and sophisticated multi-pressure designs.

Flow control

Flow control sandwich plate provides actuator speed control.



Single station sub-base

For applications requiring single valves located remotely from the valve island.

Inlet air control (VS18/VS26)

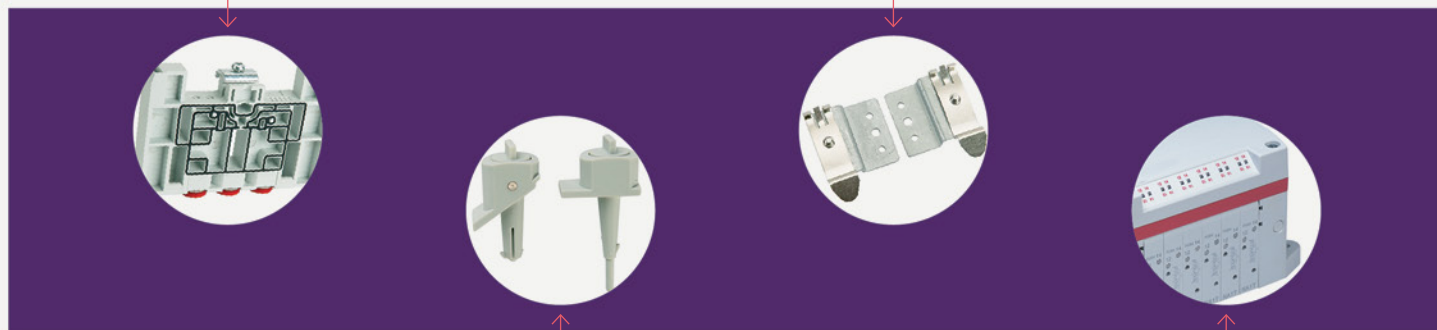
Single valve shut-off plate allows exchange of valve while valve island is pressurised.

VM Series

Compact accessory concept for lightweight solutions

ISEMs (Intermediate Supply Exhaust Module) enable multiple pressures to be controlled in one valve island

Robust bracket for mounting directly or via DIN rail



Clip in manual overrides for VM10 for operating solenoid overrides without the need for tools

Stick on label and hinged label housing provide flexibility in valve identification

VR Series

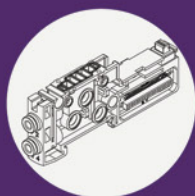
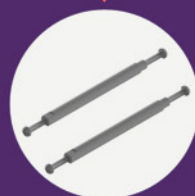
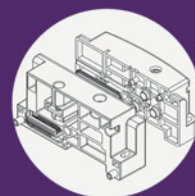
Proven and flexible accessory platform

Supply / Exhaust Modules (ISEM)

Enable flexible air supply and exhaust configurations, with internal or external pilot options and variants with or without silencers, supporting a wide range of system layouts.

Tie rods

Provide a robust and proven method to expand valve islands by adding stations and supply/exhaust modules, ensuring structural stability across different island sizes.



Sub-bases

Available in single and double wiring versions with multiple port sizes, allowing flexible valve configurations and easy adaptation to application requirements.

End plates (IP40 / IP65)

Left and right end plates are available for both IP40 and IP65 solutions, supporting different environmental and installation requirements.

VSR Series

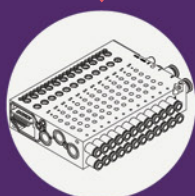
Optimised accessories for cost-efficient solutions

Expandable sub-base architecture

A common, IP65-rated sub-base platform enabling simple system expansion and allowing the combination of 10 mm and 15 mm valve sizes on a single valve island.

ISEM (Intermediate Supply & Exhaust Module)

An ISEM is used to connect an Extension Sub-Base to a Fixed Length Sub-Base and contains integrated fittings that can supply additional compressed air and exhaust service to the valve island assembly.



Control modules

Integrated control modules ensure reliable valve actuation and stable industrial communication and Multipole within the IP65 system architecture.

Pressure Zone Plug

The Pressure Zone Plugs in combination with an ISEM allow for up to three pressure zones on one valve island configuration.

Our Industrial Automation sector operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Europe, Americas and Asia Pacific.

Supported by distributors worldwide.

For further information, scan this QR code or visit

www.imiplc.com/industrial-automation



Industrial Automation

IMI Norgren

IMI Bimba

IMI Bahr

IMI Buschjost

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